THIAD JA Ges A Short Story of William R. Jones November, 1903 Wyman & Sordon, Worcester, Mass.



WILLIAM RICHARD JONES

WILLIAM RICHARD JONES

6 HE most important man in the Carnegie scheme." Such is the high praise given to William R. Jones. He was par excellence a captain of industry. His father was a clergyman, who came to this country from Wales in 1832 and was located in Pittsburgh and Hazleton, Penn. William, his eldest son, was born in 1839. His father died when he was quite young, so that he was forced to begin work with a very limited schooling.

He was apprenticed to the Crane Iron Company of Catasauqua when only ten years of age, first in the foundry and afterward in the machine-shop. No small part of his subsequent success is due to his thorough training in these two fundamental branches of the iron industry.

By fifteen he was earning journeyman's wages. In 1856 we find him at Philadelphia working as a machinist with I. P. Morris & Co., then in Clearfield County, during a commercial depression, as a lumberman and farm hand. In 1859 he is a machinist in the employ of the Cambria Iron Company; three months later he goes to Chattanooga, Tenn., employed by a blast-furnace company, where he remains until 1861, when, by the breaking out of the Civil War, he is forced to flee with his young bride.

A year later he enlists in the 133d Pennsylvania Voluntèers, is wounded, but rises to the rank of corporal. At the expiration of his enlistment he returns to the Cambria Iron Company, but soon raises a company of men and, as their captain, re-enlists in the 194th Pennsylvania Volunteers, and serves to the close of the war. The latter part of the time he was Provost Marshal for the city of Baltimore, a position requiring both tact and firmness, and for which service he received honorable mention. Then he returns again to Johnstown to be assistant to George Fritz, the chief engineer of the Cambria Iron Company. In this position he is busied in designing and constructing the famous Bessemer plant and blooming mill, under the direction of two of the most brilliant of American mechanical engineers, Alexander L. Holley and George Fritz.

Following the death of Fritz, Jones resigned from the service of the Cambria Company. So well had he done his work that Holley, who had designed the Edgar Thompson Steel Works at Braddock, selected him to be the master mechanic. Holley was at this time consulting engineer of the Associated Bessemer Manufacturers, and acquainted with all the principal steel men. He looked upon Jones as the best practical administrator among them all.

Later Jones became the general superintendent, and still later, in 1888, consulting engineer to all the Carnegie companies. In these years he erected their great Bessemer plants, the remarkable series of blast furnaces known as A, B, C, D, E, F and G, and the gigantic rolling mills; he met and overcame all the contingencies of daily operation and intense competition that culminated in making these establishments the finest in the world and a transcendent financial success.

A dozen patents stand to his credit and all have to do with the manufacture of steel. The first was granted in 1876, a device for operating Bessemer ladles, and the last, in 1889, considered to be the most important, a method for mixing in receiving tanks the metal from blast furnaces.

But his fame does not rest upon these few patents. Like all mechanical engineers engaged in the practical administration of affairs, he invented and devised far more than he patented. Invention was to him a necessary incident of daily routine.

These vast concerns are not born full grown. En-

gineers' plans are never perfect on first presentation. Errors are to be corrected, omissions supplied, interferences adjusted, methods simplified by incessant watchfulness and practical mechanical judgment.

There is also a struggle for existence and a survival of the fittest among steel plants as among animals. A comparison of daily reports, a searching of costs, the stimulus of competition—all compel constant improvement or defeat, and time has shown that Jones was to be trusted to keep the mechanical equipment of the Carnegie plants ahead of all competitors.

Here were thousands of men employed, and the selection and management of men measures, in large degree, the success or failure of any enterprise.

In these things Captain Jones was pre-eminent. Under his control vast forces were co-ordinated, warring elements harmonized, selfish interests dominated, and the whole organization vitalized, until the production of a single blast furnace went up before his death from 350 tons a week in 1872 to nearly 2800 tons per week.

One of the wires to this Carnegie system was rivalry between heads of departments. Rewards were given for record outputs, these were made the standard, and woe betide him who fell short.

. It was competition, bitter and relentless, engendering strife and hard feeling, and yet none dared to let up on the terrible pace.

Jones was not responsible for this. He was too high spirited to stand it himself, and when his protests were unheeded, he sent in his resignation again and again, only to be won back; he was too valuable a man to lose.

"You can imagine the abounding sense of freedom and relief when I go aboard ship and sail past Sandy Hook," once said Andrew Carnegie to Captain Jones. "My God, think of the relief to us," exclaimed Jones. When Carnegie offered him a partnership he declined, but accepted "a thundering big salary," \$50,000 a year, when salaries of ten were few and far between.

When Carnegie was taken to task by some of the other steel manufacturers for paying such a salary, he responded that he would be glad to pay double if they knew of any more like him.

Under Jones' management men worked as never before or since. His unerring mechanical judgment, his organizing ability, his unfailing energy, his resistless enthusiasm, won their hearts, and they responded loyally as to a recognized and trusted master.

In his dealings with them Jones was considerate and sympathetic, at the same time forceful and determined. He attempted an eight-hour day at the Edgar Thompson, but when it was shown that it was falling slightly behind the others, it was vetoed.

When called upon to resist extreme demands his opposition was open and above board, so that even in the very fiercest of the conflict he retained the good will of his opponents.

It was characteristic of him, at the time of the Johnstown flood, to take several hundred workmen from Braddock by special train. The track was destroyed ten miles from Johnstown, but Jones marched the men overland, and was the first outside assistance to reach the scene of destruction...Under his trained direction, they rendered invaluable service in the work of rescue and relief.

He was a member of the American Institute of Mining Engineers, and, although the leading iron and steel expert of the country, persistently refused to accept office or read papers. He was also a member of the American Society of Mechanical Engineers, and of the British Iron and Steel Institute.

He was a man of considerable property, of stalwart figure, and attractive face. His striking portrait shows a remarkable likeness to that of the greatest of Roman commanders, Julius Caesar, save only the eyes, which belonged to Jones alone, keen, alert, laughing and honest, characteristic of the real man.

His tragic death was a striking close to such a life. Blast furnace C had been in trouble for several days. The regular organization was unable to bring it under control. Captain Jones assumed personal charge of affairs, and while directing the work, an explosion occurred in the furnace which caused a rush of gas and molten cinder to fly in all directions. Several men were badly injured, and he was not only horribly burned, but was blown against an iron cinder car, fracturing his skull. He suffered intense agony for two days, and died Sept. 28, 1889.

In the resolutions offered by the managers of the Carnegie properties, it was said:

"We would not forget that the commander fell at the head of his men, at the post of duty, amid the roar of the vast establishment which was his work and is his monument."

DWIGHT GODDARD.

Copyright 1903, D. Goddard.

THESE SHORT STORIES

OF ENGINEERS

ARE ISSUED TO KEEP OUR NAME BEFORE YOU.

We have sent out the following:

JAMES WATT,* JOHN ERICSSON, MATTHEW BOULTON, SIR JOSEPH WHITWORTH,* ROBERT FULTON,* BENJAMIN FRANKLIN, GEORGE STEPHENSON, JOHN FITCH, JAMES NASMYTH, OLIVER EVANS,* SIR HENRY BESSEMER, JOHN STEVENS, SIR WILLIAM SIEMENS, ELI WHITNEY, ALFRIED KRUPP, THOMAS BLANCHARD, ELIAS HOWE, PETER COOPER, ALEXANDER L. HOLLEY.

*Out of Print.

Others to follow.

WYMAN & GORDON.

NOV 14 1903

IT IS A NEW THING

TO MAKE CRANK SHAFTS LIKE THIS.



1 3-4 inch Shaft. Weight, 35 pounds.

WE ARE MAKING THEM SUCCESSFULLY BECAUSE WE HAVE THE EQUIPMENT

STEAM HAMMERS

HYDRAULIC PRESSES DROP HAMMERS

AND TWENTY YEARS' EXPERIENCE.

DROP FORGING LARGE AND SMALL.

YOU CAN SAFELY TRUST YOUR FORGING TO

WYMAN & GORDON,

Office, WORCESTER, MASS. Works, WORCESTER, MASS., CLEVELAND, OHIO.